isDesign

Client: Project: Address:

GREENPARK

ZADORRA ESTATES OSHAWA,ON

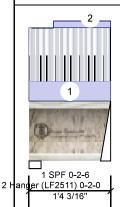
7/10/2023 Date: WC Input by:

Job Name: Level: Ground Floor

F1 AJS 140 11.875" - PASSED

TRUE COPY OF PERMIT PLANS

15 2023



11 7/8"

1'4 3/16'

| Type: | Girder |
|---------------------|-------------|
| Plies: | 1 |
| Moisture Condition: | Dry |
| Deflection LL: | 360 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| General Load | |

Floor Live: 40 PSF 15 PSF Dead:

Floor (Residential)

Design Method: LSD **Building Code: NBCC 2015** OBC 2012(2020 Update)

Load Sharing:

Application:

Not Checked Deck: Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 44 | 19 | 0 | 0 |
| 2 | Vertical | 42 | 21 | 0 | 0 |

Bearings and Factored Reactions

| Bearing Length | Dir. | Cap. Re | eact D/L I b | Total | Ld. Case | Ld. Comb. |
|----------------------|------|---------|---------------------|-------|----------|------------|
| 1 - SPF 2.375" | Vert | 5% | 24 / 65 | 89 | L | 1.25D+1.5L |
| 2 - 2.000" Hanger | Vert | 5% | 26 / 62 | 88 | L | 1.25D+1.5L |

Analysis Results

| Ana l ysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|-------------------|---------------------|------------|---------------|------------|------------|---------|
| Moment | 20 ft-lb | 8 5/16" | 5305 ft-lb | 0.004 (0%) | 1.25D+1.5L | L |
| Unbraced | 20 ft-lb | 8 5/16" | 5305 ft-lb | 0.004 (0%) | 1.25D+1.5L | L |
| Shear | 74 lb | 1'2 15/16" | 2350 lb | 0.032 (3%) | 1.25D+1.5L | L |
| Perm Defl in | 0.000 (L/184462) | 8 3/8" | 0.037 (L/360) | 0.002 (0%) | D | Uniform |
| LL Defl inch | 0.000 (L/89698) | 8 5/16" | 0.037 (L/360) | 0.004 (0%) | L | L |
| TL Defl inch | 0.000 (L/60355) | 8 5/16" | 0.055 (L/240) | 0.004 (0%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Right Header: SPF, Thickness: 2 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.

0-4-14 to 1-4-3

6 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.

| 18 | VINOT ESSIONAL | 1 |
|-----|--------------------------|------|
| THE | I.MATIJEVIC 100528832 | MILE |
| 10 | | / |
| | OF IIIIV 11 2023 | |

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: EWP-FLOORS. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

ID Load Type Location Trib Width Side Dead Live Snow Wind Comments Tie-In 0-0-0 to 1-4-3 Top 15 PSF 40 PSF 0 PSF 0 PSF

Top

2

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily fastening details and
 handling/erection details

 3. Damaged IJoists must not be used
 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

8 PLF

0 PLF

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length=3.5 inches
 For flat roofs provide proper drainage to prevent

This design is valid until 4/17/2026

Manufacturer Info

0 PLF

Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702

0 PLF

(800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400





Part. Uniform

| Member Information | | | | | Unfactored Reactions UNPATTERNED Ib (Uplift) | | | | | | |
|----------------------------------|-------------|------------------|------------------------------------|-----|--|---------|--------|--------------|-------|----------|------------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Direction | | Live | Dead | | Snow | Wind |
| Plies: | 2 | Design Method: | LSD | 1 | Vertical | 1 | 1816 | 767 | | 0 | 0 |
| Moisture Condition | • | Building Code: | NBCC 2015 OBC 2012(2020 Update) | 2 | Vertical | 1 | 1923 | 814 | | 0 | 0 |
| Deflection LL: Deflection TL: | 360 240 | Load Sharing: | No | | | | | | | | |
| Importance: General Load | Normal - II | Deck: Vibration: | Not Checked Not Checked | | | | | | | | |
| Floor Live: | 40 PSF | | | Bea | rings and F | actored | d Read | ctions | | | |
| Dead: | 15 PSF | | | Bea | aring Length | Dir. | Cap. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
| | | | | 1 - | SPF 5.250" | Vert | 33% | 959 / 2724 | 3682 | L | 1.25D+1.5L |
| | | | | 2 - | SPF 2.375" | Vert | 76% | 1017 / 2885 | 3902 | L | 1.25D+1.5L |

11'1 5/16' 11'1 5/16'

Analysis Results

. 1 SPF 0-5-4

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|----------------|------------|------------------|-------------|------------|---------|
| Moment | 10859 ft-lb | 6' 9/16" | 35392 ft-lb | 0.307 (31%) | 1.25D+1.5L | L |
| Unbraced | 10859 ft-lb | 6' 9/16" | 35392 ft-lb | 0.307 (31%) | 1.25D+1.5L | L |
| Shear | 3884 lb | 9'11 1/16" | 13217 l b | 0.294 (29%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.045 (L/2846) | 5'8 11/16" | 0.353 (L/360) | 0.126 (13%) | D | Uniform |
| LL Defl inch | 0.105 (L/1206) | 5'8 5/8" | 0.353 (L/360) | 0.298 (30%) | L | L |
| TL Defl inch | 0.150 (L/847) | 5'8 5/8" | 0.530 (L/240) | 0.283 (28%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.
- 7 Lateral slenderness ratio based on full section width.



2 SPF 0-2-6

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| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|---------------|-----------------|------------|-----------|----------------|---------|--------------|-------|----------|
| 1 | Tie-In | 0-0-0 to 0-2-10 | 0-7-11 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-2-10 to 6-8-0 | 0-7-11 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Point | 1-0-7 | | Near Face | 114 l b | 303 lb | 0 l b | 0 lb | J5 |
| 4 | Part. Uniform | 1-8-7 to 9-8-7 | | Near Face | 118 PLF | 314 PLF | 0 PLF | 0 PLF | |
| 5 | Point | 6-9-12 | | Far Face | 174 l b | 346 lb | 0 lb | 0 lb | F11 |

Continued on page 2...

Notes

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

 2. Refer to manufacturer's product information regarding installation requirements, multi-pty fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

(800) 232-0788 www.bc.com CCMC: 12472

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400



This design is valid until 4/17/2026

11 7/8"

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-pty fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

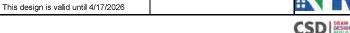
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12472







Client: Project: Address:

GREENPARK

ZADORRA ESTATES

7/10/2023 WC

Job Name: ROSE 2-3 STD Projec #

Versa-Lam LVL 2.1E 3100 SP

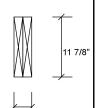
OSHAWA,ON .750° X PI 575'0 - PASSED Level: Ground Floor **2-191** OF PERMIT PLANS



1 Hanger (LF3511) 0-2-0

7'3 7/8'

7'3 7/8'



ι

2 SPF End Grain 0-2-13

Grain

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal - II

Member Information

General Load

Floor Live: 40 PSF 15 PSF Dead:

Application: Floor (Residential) Design Method: LSD

Building Code: NBCC 2015 OBC 2012(2020 Update)

Load Sharing:

Not Checked Deck:

Vibration: Not Checked

| Unfactored | Reactions | UNPATTERNED Ib | (Uplift) |
|------------|-----------|----------------|----------|
| | | O | (|

| E | 3rg | Direction | Live | Dead | Snow | Wind |
|---|-----|-----------|------|------|------|------|
| | 1 | Vertical | 346 | 174 | 0 | 0 |
| | 2 | Vertical | 296 | 155 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
|----------------|--------|------|------|--------------|-------|----------|------------|
| 1 - Hanger | 2.000" | Vert | 10% | 217 / 520 | 737 | L | 1.25D+1.5L |
| 2 - SPF End | 2.844" | Vert | 6% | 194 / 443 | 637 | L | 1.25D+1.5L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|--------------------|------------|------------------|------------|------------|---------|
| Moment | 1274 ft-lb | 3'3 1/4" | 35392 ft-lb | 0.036 (4%) | 1.25D+1.5L | L |
| Unbraced | 1274 ft-lb | 3'3 1/4" | 35392 ft-lb | 0.036 (4%) | 1.25D+1.5L | L |
| Shear | 789 l b | 6'1 3/16" | 13217 l b | 0.060 (6%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.003 (L/31512) | 3'6 13/16" | 0.235 (L/360) | 0.011 (1%) | D | Uniform |
| LL Defl inch | 0.005 (L/15730) | 3'6 5/8" | 0.235 (L/360) | 0.023 (2%) | L | L |
| TL Defl inch | 0.008 (L/10492) | 3'6 11/16" | 0.352 (L/240) | 0.023 (2%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: DF, Thickness: 3 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top must be continuously laterally braced.
- 7 Bottom must have sheathing attached or be continuously braced.
- 8 Lateral slenderness ratio based on full section width.



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| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|---------------|------------------|------------|----------|--------|---------|--------------|--------------|----------|
| 1 | Part. Uniform | 0-5-11 to 3-1-11 | | Far Face | 48 PLF | 127 PLF | 0 PLF | 0 PLF | |
| 2 | Part. Uniform | 3-1-11 to 5-9-11 | | Far Face | 30 PLF | 80 PLF | 0 PLF | 0 PLF | |
| 3 | Point | 6-5-11 | | Far Face | 34 lb | 90 lb | 0 l b | 0 l b | J1 |
| 1 | | | | | | | | | |

Notes

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-by fastening details, beam strength values, and code approvals Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

12 PLF

Manufacturer Info Boise Cascade Wood Products

1111 W. Jefferson St. Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400



This design is valid until 4/17/2026



Self Weight

isDesign

Client: **GREENPARK**

Project:

Address: **ZADORRA ESTATES** OSHAWA,ON

W C Input by:

Date:

Job Name: Level: Ground Floor

7/10/2023

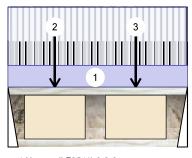
F2 **AJS 140**

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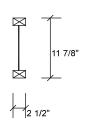


1 Hanger (LF2511) 0-2-0

2 Hanger (LF2511) 0-2-0 2'11 1/2'

15 PSF

2'11 1/2'



Member Information

Application: Floor (Residential) Type: Plies: 1 Design Method: LSD Moisture Condition: Dry **Building Code: NBCC 2015** OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Not Checked Deck: Importance: Normal - II Vibration: Not Checked General Load Floor Live: 40 PSF

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 329 | 123 | 0 | 0 |
| 2 | Vertical | 318 | 119 | 0 | 0 |
| | | | | | |

Analysis Results

Dead:

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|--------------------|------------|---------------|-------------|------------|---------|
| Moment | 449 ft-lb | 1'10" | 5305 ft-lb | 0.085 (8%) | 1.25D+1.5L | L |
| Unbraced | 449 ft-lb | 1'10" | 5305 ft-lb | 0.085 (8%) | 1.25D+1.5L | L |
| Shear | 642 lb | 1 1/4" | 2350 lb | 0.273 (27%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.002 (L/20162) | 1'6 7/8" | 0.092 (L/360) | 0.018 (2%) | D | Uniform |
| LL Defl inch | 0.004 (L/7550) | 1'6 15/16" | 0.092 (L/360) | 0.048 (5%) | L | L |
| TL Defl inch | 0.006 (L/5493) | 1'6 7/8" | 0.138 (L/240) | 0.044 (4%) | D+L | L |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. Re | act D/L I b | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|---------|--------------------|-------|----------|------------|
| 1 - | 2.000" | Vert | 40% | 154 / 494 | 648 | L | 1.25D+1.5L |
| Hanger | | | | | | | |
| 2 - | 2.000" | Vert | 39% | 149 / 476 | 625 | L | 1.25D+1.5L |
| Hanger | | | | | | | |

Design Notes

- Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: SPF, Thickness: 2 1/2"
- 4 Right Header: SPF, Thickness: 2 1/2"
- 5 Girders are designed to be supported on the bottom edge only.
- 6 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.

7 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.



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| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|-----------|-----------------|------------|----------|----------------|----------------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 2-11-8 | 0-9-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Point | 0-9-5 | | Far Face | 103 l b | 274 l b | 0 lb | 0 lb | J4 |
| 3 | Point | 2-1-5 | | Far Face | 106 lb | 284 lb | 0 lb | 0 lb | J4 |

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Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily fastening details and
 handling/erection details

 3. Damaged IJoists must not be used
 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

- Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length=3.5 inches
 For flat roofs provide proper drainage to prevent

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St.

Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.







Client: **GREENPARK**

Project:

Address: **ZADORRA ESTATES** OSHAWA,ON

Input by:

Job Name: P 230 Level: Ground Floor

7/10/2023

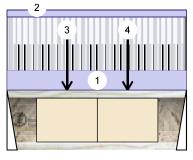
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11.875" - PA

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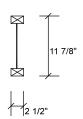
15 2023



1 Hanger (LF2511) 0-2-0

2 Hanger (LF2511) 0-2-0 2'11 1/2'

2'11 1/2"



Member Information

| Туре: | Girder | Application: | Floor (Residential) |
|---------------------|-------------|----------------|-----------------------|
| Plies: | 1 | Design Method: | LSD |
| Moisture Condition: | Dry | Building Code: | NBCC 2015 |
| Deflection LL: | 360 | | OBC 2012(2020 Update) |
| Deflection TL: | 240 | Load Sharing: | No |
| Importance: | Normal - II | Deck: | Not Checked |
| General Load | | Vibration: | Not Checked |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | | |

Unfactored Reactions UNPATTERNED lb (Uplift)

| Wind | Snow | Dead | Live | Direction | Brg |
|------|------|------|------|-----------|-----|
| 0 | 0 | 187 | 366 | Vertical | 1 |
| 0 | 0 | 195 | 370 | Vertical | 2 |
| | 0 | 195 | 370 | Vertical | 2 |

Analysis Results

| Analysis | Actua l | Location | Allowed | Capacity | Comb. | Case |
|---------------|--------------------|------------|---------------|-------------|------------|---------|
| Moment | 670 ft-lb | 1'5 11/16" | 5305 ft-lb | 0.126 (13%) | 1.25D+1.5L | L |
| Unbraced | 670 ft-lb | 1'5 11/16" | 5305 ft-lb | 0.126 (13%) | 1.25D+1.5L | L |
| Shear | 792 lb | 2'10 1/4" | 2350 lb | 0.337 (34%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.003 (L/10677) | 1'6 3/8" | 0.092 (L/360) | 0.034 (3%) | D | Uniform |
| LL Defl inch | 0.006 (L/5547) | 1'5 1/2" | 0.092 (L/360) | 0.065 (6%) | L | L |
| TL Defl inch | 0.009 (L/3651) | 1'5 13/16" | 0.138 (L/240) | 0.066 (7%) | D+L | L |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. Re | eact D/L I b | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|---------|---------------------|-------|----------|------------|
| 1 - | 2.000" | Vert | 49% | 234 / 550 | 784 | L | 1.25D+1.5L |
| Hanger | | | | | | | |
| 2 - | 2.000" | Vert | 50% | 244 / 555 | 799 | L | 1.25D+1.5L |
| Hanger | | | | | | | |

Design Notes

- Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: SPF, Thickness: 2 1/2"
- 4 Right Header: SPF, Thickness: 2 1/2"
- 5 Girders are designed to be supported on the bottom edge only.
- 6 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum

2' o.c. 7 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.



IUI Y 11 2023

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|----------------|
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| = |
| o J5 |
| o J5 |
| SF LF Ik |

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Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the Jioist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-rjly fastening details and handling/erection details

 3. Damaged Jioists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

- 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
 6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 7. For flat roofs provide proper drainage to prevent ponding.

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St.

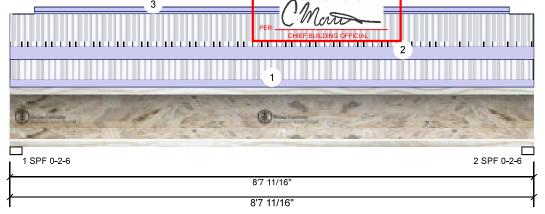
Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

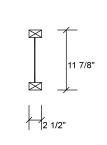
Kott Inc.











Member Information

| Туре: | Girder |
|---------------------|-------------|
| Plies: | 1 |
| Moisture Condition: | Dry |
| Deflection LL: | 360 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| General Load | |

Floor Live: 40 PSF 15 PSF Dead:

Application: Floor (Residential) LSD

Design Method:

| Decigii Metrica. | LOD |
|------------------|------------------------------------|
| Building Code: | NBCC 2015 OBC 2012(2020 Update) |
| Load Sharing: | No |
| Deck: | Not Checked |
| Vibration: | Not Checked |

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 205 | 100 | 0 | 0 |
| 2 | Vertical | 205 | 100 | 0 | 0 |
| | | | | | |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. Re | act D/L I b | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|---------|--------------------|-------|----------|------------|
| 1 - SPF | 2.375" | Vert | 26% | 125 / 308 | 433 | L | 1.25D+1.5L |
| 2 - SPF | 2.375" | Vert | 26% | 125 / 308 | 433 | L | 1.25D+1.5L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|----------------|----------|---------------|-------------|------------|---------|
| Moment | 883 ft-lb | 4'3 7/8" | 5305 ft-lb | 0.166 (17%) | 1.25D+1.5L | L |
| Unbraced | 883 ft-lb | 4'3 7/8" | 5305 ft-lb | 0.166 (17%) | 1.25D+1.5L | L |
| Shear | 420 lb | 1 5/8" | 2350 lb | 0.179 (18%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.011 (L/8763) | 4'3 7/8" | 0.279 (L/360) | 0.041 (4%) | D | Uniform |
| LL Defl inch | 0.023 (L/4390) | 4'3 7/8" | 0.279 (L/360) | 0.082 (8%) | L | L |
| TL Defl inch | 0.034 (L/2925) | 4'3 7/8" | 0.419 (L/240) | 0.082 (8%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.

4 Bottom flange



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: EWP-FLOORS. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING RITERIA

| ge must be laterally l | braced at bearings. | | , | | | | | IFICATIONS AND OF THIS COMPON | |
|------------------------|---------------------|------------|------|--------|--------|-------|-------|----------------------------------|--|
| Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments | |
| Tie-In | 0-0-0 to 8-7-11 | 0-5-6 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | | |

1 0-0-0 to 8-7-11 0-8-14 15 PSF 40 PSF 0 PSF 0 PSF 2 Top 3 Part. Uniform 0-4-14 to 8-2-13 Тор 2 PLF 0 PLF 0 PLF 0 PLF Part. Uniform 0-4-14 to 8-2-13 4 PLF 0 PLF 0 PLF 0 PLF Top

ID

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily fastening details and
 handling/erection details

 3. Damaged IJoists must not be used
 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.
- 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
 6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 7. For flat roofs provide proper drainage to prevent ponding.

This design is valid until 4/17/2026

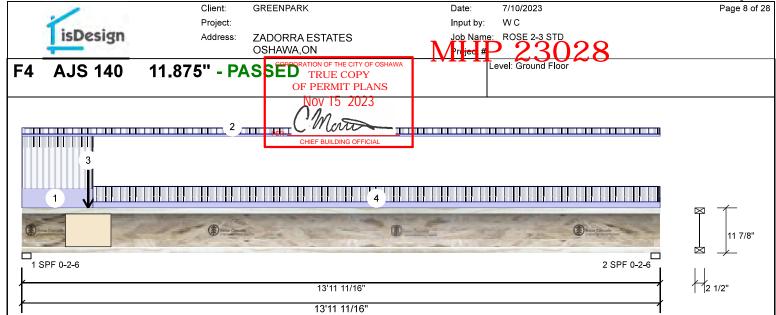
Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702

(800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.





Member Information Unfactored Reactions UNPATTERNED Ib (Uplift) Application: Floor (Residential) Wind Type: Brg Direction Live Dead Snow Plies: Design Method: LSD 202 Vertical 539 0 1 0 Moisture Condition: Dry Building Code: **NBCC 2015** 2 Vertical 220 83 n 0 OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Not Checked Deck: Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Dead: Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 253 / 808 1 - SPF 2.375" Vert 63% 1061 L 1.25D+1.5L 2 - SPF 2.375" Vert 26% 103 / 330 433 I 1.25D+1.5L

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|------------|---------------|-------------|------------|---------|
| Moment | 1730 ft-lb | 5'8 11/16" | 5305 ft-lb | 0.326 (33%) | 1.25D+1.5L | L |
| Unbraced | 1730 ft-lb | 5'8 11/16" | 5305 ft-lb | 0.326 (33%) | 1.25D+1.5L | L |
| Shear | 1043 lb | 1 5/8" | 2350 lb | 0.444 (44%) | 1.25D+1.5L | L |
| Perm Defl in | 0.041 (L/3964) | 6'7 7/16" | 0.457 (L/360) | 0.091 (9%) | D | Uniform |
| LL Defl inch | 0.111 (L/1486) | 6'7 7/16" | 0.457 (L/360) | 0.242 (24%) | L | L |
| TL Defl inch | 0.152 (L/1081) | 6'7 7/16" | 0.685 (L/240) | 0.222 (22%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o c
- Bottom flange must be laterally braced at a maximum of 12'6 5/16" o.c.



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: EWP-FLOORS. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments | |
|------------|-----------|--------------------|------------|----------|----------------|----------------|-------|-------|----------|--|
| 1 | Tie-In | 0-0-0 to 1-6-11 | 1-7-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | | |
| 2 | Tie-In | 0-0-0 to 13-11-11 | 0-2-4 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | | |
| 3 | Point | 1-5-7 | | Far Face | 119 l b | 318 l b | 0 lb | 0 lb | F2 | |
| 4 | Tie-In | 1-6-11 to 13-11-11 | 0-5-12 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | | |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily fastening details and
 handling/erection details

 3. Damaged IJoists must not be used
 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

- Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length=3.5 inches
 For flat roofs provide proper drainage to prevent

This design is valid until 4/17/2026

Manufacturer Info

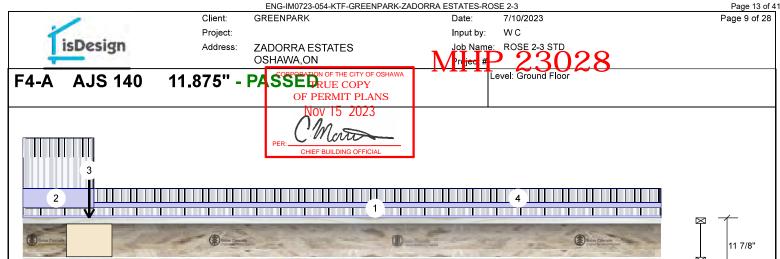
Boise Cascade Wood Products 1111 W. Jefferson St.

Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.







Member Information **Unfactored Reactions UNPATTERNED lb (Uplift)** Application: Floor (Residential) Wind Type: Brg Direction Live Dead Snow Plies: Design Method: LSD 207 Vertical 552 0 1 0 Moisture Condition: Dry **Building Code: NBCC 2015** 2 Vertical 221 83 n 0 OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Not Checked Deck: Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Dead: Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.375" Vert 64% 258 / 828 1086 L 1.25D+1.5L

2 - SPF 2.375"

Vert

26%

13'11 11/16' 13'11 11/16"

Analysis Results

. 1 SPF 0-2-6

| Analysis | Actua l | Location | Allowed | Capacity | Comb. | Case |
|---------------|----------------|-----------|---------------|-------------|------------|---------|
| Moment | 1749 ft-lb | 5'8 1/8" | 5305 ft-lb | 0.330 (33%) | 1.25D+1.5L | L |
| Unbraced | 1749 ft-lb | 5'8 1/8" | 5305 ft-lb | 0.330 (33%) | 1.25D+1.5L | L |
| Shear | 1066 lb | 1 5/8" | 2350 lb | 0.454 (45%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.042 (L/3923) | 6'7 5/16" | 0.457 (L/360) | 0.092 (9%) | D | Uniform |
| LL Defl inch | 0.112 (L/1470) | 6'7 5/16" | 0.457 (L/360) | 0.245 (24%) | L | L |
| TL Defl inch | 0.154 (L/1069) | 6'7 5/16" | 0.685 (L/240) | 0.224 (22%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o c

4 Bottom flange must be laterally braced at a maximum of 12'6 5/16" o.c.



104 / 332

436

1.25D+1.5L

2 SPF 0-2-6

IUI Y 11 2023

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| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|-----------|--------------------|------------|-----------|--------|--------|-------|--------------|----------|
| 1 | Tie-In | 0-0-0 to 13-11-11 | 0-2-12 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 1-6-11 | 1-7-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Point | 1-5-7 | | Near Face | 123 lb | 329 lb | 0 lb | 0 l b | F2 |
| 4 | Tie-In | 1-6-11 to 13-11-11 | 0-5-4 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| | | | | | | | | | |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily fastening details and
 handling/erection details

 3. Damaged IJoists must not be used
 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

- Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length=3.5 inches
 For flat roofs provide proper drainage to prevent

This design is valid until 4/17/2026

Manufacturer Info

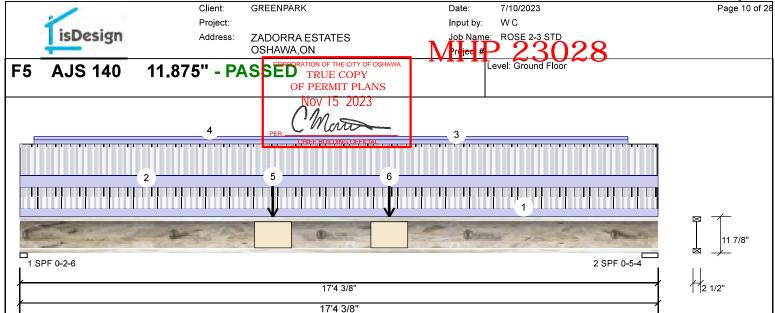
Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702

(800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.







| Member Inforn | nation | | | Unfactored Reactions UNPATTERNED lb (Uplift) | | | | | | | |
|---------------------|-------------|----------------|-----------------------|--|--------------|---------|-------|--------------|-------|----------|------------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Direction | I | _ive | Dead | | Snow | Wind |
| Plies: | 1 | Design Method: | LSD | 1 | Vertical | | 472 | 240 | | 0 | 0 |
| Moisture Condition: | Dry | Building Code: | NBCC 2015 | 2 | Vertical | | 484 | 242 | | 0 | 0 |
| Deflection LL: | 360 | | OBC 2012(2020 Update) | | | | | | | | |
| Deflection TL: | 240 | Load Sharing: | No | | | | | | | | |
| Importance: | Normal - II | Deck: | Not Checked | | | | | | | | |
| General Load | | Vibration: | Not Checked | | | | | | | | |
| Floor Live: | 40 PSF | | | Bea | rings and F | actored | l Rea | ctions | | | |
| Dead: | 15 PSF | | | Be | aring Length | Dir. | Сар. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
| | | | | 1 - | SPF 2.375" | Vert | 60% | 300 / 708 | 1008 | L | 1.25D+1.5L |
| | | | | J 2_ | SPF 5.250" | Vert | 54% | 303 / 725 | 1028 | 1 | 1 25D+1 5I |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|----------------|------------|---------------|-------------|------------|---------|
| Moment | 4432 ft-lb | 8'6 7/8" | 5305 ft-lb | 0.835 (84%) | 1.25D+1.5L | L |
| Unbraced | 4432 ft-lb | 8'6 7/8" | 5305 ft-lb | 0.835 (84%) | 1.25D+1.5L | L |
| Shear | 995 lb | 1 5/8" | 2350 lb | 0.423 (42%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.188 (L/1074) | 8'6 11/16" | 0.562 (L/360) | 0.335 (34%) | D | Uniform |
| LL Defl inch | 0.368 (L/550) | 8'6 11/16" | 0.562 (L/360) | 0.654 (65%) | L | L |
| TL Defl inch | 0.556 (L/364) | 8'6 11/16" | 0.843 (L/240) | 0.660 (66%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o c

4 Bottom flange must be laterally braced at a maximum of 7'3 3/4" o.c.



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| | Dottom nango mac | or be laterally bracea | at a maximum o | 1 7 0 07 1 0.0. | | | | | | |
|----|------------------|------------------------|----------------|-----------------|-----------|--------|--------|--------------|--------------|----------|
| II | D Lo | ad Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 1 | Tie | e-In 0 | -0-0 to 17-4-6 | 0-6-1 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie | e-In 0 | -0-0 to 17-4-6 | 0-9-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Pa | ırt. Uniform 0 | -4-9 to 16-6-9 | | Тор | 4 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 4 | Pa | ırt. Uniform 0 | -4-9 to 16-6-9 | | Тор | 3 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 5 | Poi | oint | 6-10-10 | | Near Face | 21 lb | 42 lb | 0 lb | 0 lb | F1 |
| 6 | Poi | pint | 10-0-10 | | Near Face | 21 lb | 42 lb | 0 l b | 0 l b | F1 |
| | | | | | | | | | | |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

- Handling & Installation
- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the Jioist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-rjly fastening details and handling/erection details

 3. Damaged Jioists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

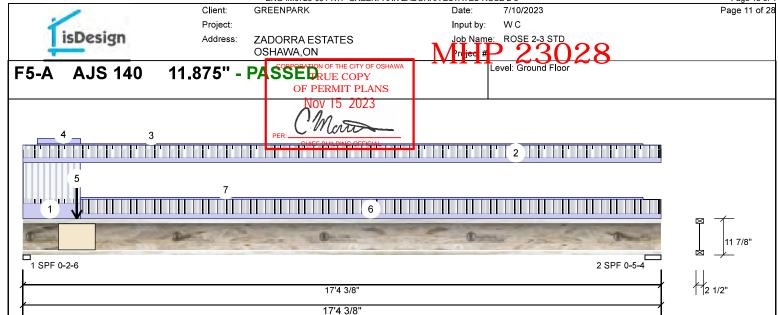
Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

(800) 232-0788 www.bc.com CCMC: 12787







| Member Infor | mation | | | Unfa | actored Rea | ctions U | NP/ | ATTERNED II | b (Up l i | ift) | |
|--------------------|-------------|----------------|-----------------------|------|--------------|-----------|------|--------------|------------------|----------|------------|
| Type: | Girder | Application: | Floor (Residential) | Brg | Direction | Live | Э | Dead | | Snow | Wind |
| Plies: | 1 | Design Method: | LSD | 1 | Vertical | 756 | 3 | 376 | | 0 | 0 |
| Moisture Condition | n: Dry | Building Code: | NBCC 2015 | 2 | Vertical | 398 | В | 195 | | 0 | 0 |
| Deflection LL: | 360 | | OBC 2012(2020 Update) | | | | | | | | |
| Deflection TL: | 240 | Load Sharing: | No | | | | | | | | |
| Importance: | Normal - II | Deck: | Not Checked | | | | | | | | |
| General Load | | Vibration: | Not Checked | - | | | | | | | |
| Floor Live: | 40 PSF | | | Bear | rings and Fa | actored R | lead | ctions | | | |
| Dead: | 15 PSF | | | Bea | aring Length | Dir. C | ар. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
| | | | | 1 - | SPF 2.375" | Vert 9 | 95% | 470 / 1135 | 1605 | L | 1.25D+1.5L |
| | ·- | | | 2 - | SPF 5.250" | Vert 4 | 14% | 244 / 597 | 841 | L | 1.25D+1.5L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|-----------------|------------|---------------|-------------|------------|---------|
| Moment | 3726 ft-lb | 7'9 5/8" | 5305 ft-lb | 0.702 (70%) | 1.25D+1.5L | L |
| Unbraced | 3726 ft-lb | 7'9 5/8" | 5305 ft-lb | 0.702 (70%) | 1.25D+1.5L | L |
| Shear | 1583 l b | 1 5/8" | 2350 lb | 0.673 (67%) | 1.25D+1.5L | L |
| Perm Defl in | 0.160 (L/1268) | 8'3 13/16" | 0.562 (L/360) | 0.284 (28%) | D | Uniform |
| LL Defl inch | 0.321 (L/631) | 8'3 7/8" | 0.562 (L/360) | 0.571 (57%) | L | L |
| TL Defl inch | 0.480 (L/421) | 8'3 7/8" | 0.843 (L/240) | 0.570 (57%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o c

4 Bottom flange must be laterally braced at a maximum of 15'10 13/16" o.c



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| | bottom hange mast be laterally b | racca at a maximum | 01 10 10 10/10 | 0.0. | | | | | |
|----|----------------------------------|--------------------|----------------|----------|----------------|--------|-------|-------|----------|
| IC | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 1 | Tie-In | 0-0-0 to 1-6-13 | 1-7-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 17-4-6 | 0-5-15 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Part. Uniform | 0-4-10 to 16-10-8 | | Тор | 2 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 4 | Part. Uniform | 0-4-11 to 1-6-13 | | Тор | 8 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 5 | Point | 1-5-9 | | Far Face | 187 l b | 366 lb | 0 lb | 0 lb | F2 |
| 6 | Tie-In | 1-6-13 to 17-4-6 | 0-6-9 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 7 | Part. Uniform | 1-6-13 to 16-10-8 | | Тор | 3 PLF | 0 PLF | 0 PLF | 0 PLF | |
| | | | | | | | | | |

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily fastening details and
 handling/erection details

 3. Damaged IJoists must not be used
 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs provide proper drainage to prevent populing.

This design is valid until 4/17/2026

Manufacturer Info

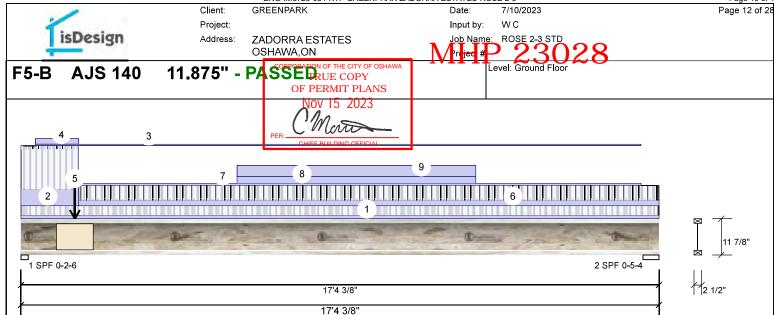
Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

(800) 232-0788 www.bc.com CCMC: 12787

Kott Inc. 3228 Moodie Dr, Ottawa, Ontario

613-838-2775 / 905-642-4400





| Member Inform | nation | | | Unfa | actored Rea | ctions UN | PATTERNED I | b (Uplift) | |
|---------------------|-------------|----------------|-----------------------|------|--------------|------------|-------------------------|----------------|------------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Direction | Live | Dead | Snow | Wind |
| Plies: | 1 | Design Method: | LSD | 1 | Vertical | 704 | 441 | 0 | 0 |
| Moisture Condition: | Dry | Building Code: | NBCC 2015 | 2 | Vertical | 340 | 264 | 0 | 0 |
| Deflection LL: | 360 | | OBC 2012(2020 Update) | | | | | | |
| Deflection TL: | 240 | Load Sharing: | No | | | | | | |
| Importance: | Normal - II | Deck: | Not Checked | | | | | | |
| General Load | | Vibration: | Not Checked | | | | | | |
| Floor Live: | 40 PSF | | | Bea | rings and Fa | actored Re | actions | | |
| Dead: | 15 PSF | | | Bea | aring Length | Dir. Cap | o. React D/L l b | Total Ld. Case | Ld. Comb. |
| | | | | 1 - | SPF 2.375" | Vert 95 | % 551 / 1056 | 1607 L | 1.25D+1.5L |
| Analysis Besylts | | ļ | | 2 - | SPF 5.250" | Vert 44 | % 330 / 510 | 840 L | 1.25D+1.5L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|---------------|-----------|---------------|-------------|------------|---------|
| Moment | 3974 ft-lb | 8' 3/8" | 5305 ft-lb | 0.749 (75%) | 1.25D+1.5L | L |
| Unbraced | 3974 ft-lb | 8' 3/8" | 5305 ft-lb | 0.749 (75%) | 1.25D+1.5L | L |
| Shear | 1586 lb | 1 5/8" | 2350 lb | 0.675 (67%) | 1.25D+1.5L | L |
| Perm Defl in | 0.240 (L/843) | 8'5 5/8" | 0.562 (L/360) | 0.427 (43%) | D | Uniform |
| LL Defl inch | 0.279 (L/725) | 8'3 3/8" | 0.562 (L/360) | 0.497 (50%) | L | L |
| TL Defl inch | 0.519 (L/390) | 8'4 7/16" | 0.843 (L/240) | 0.616 (62%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.

4 Bottom flange must be laterally braced at a maximum of 15'10 13/16" o.c.



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| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|-----------------|---------------|-------------------|------------|-----------|----------------|----------------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 17-4-6 | 0-4-1 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 1-6-13 | 1-7-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Part. Uniform | 0-4-11 to 16-10-8 | | Тор | 2 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 4 | Part. Uniform | 0-4-11 to 1-6-13 | | Тор | 8 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 5 | Point | 1-5-9 | | Near Face | 195 l b | 370 l b | 0 lb | 0 lb | F2 |
| 6 | Tie-In | 1-6-13 to 17-4-6 | 0-6-7 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 7 | Part. Uniform | 1-6-13 to 16-10-8 | | Тор | 3 PLF | 0 PLF | 0 PLF | 0 PLF | |
| Continued on pa | age 2 | | | | | | | | |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily fastening details and
 handling/erection details

 3. Damaged IJoists must not be used
 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

Manufacturer Info

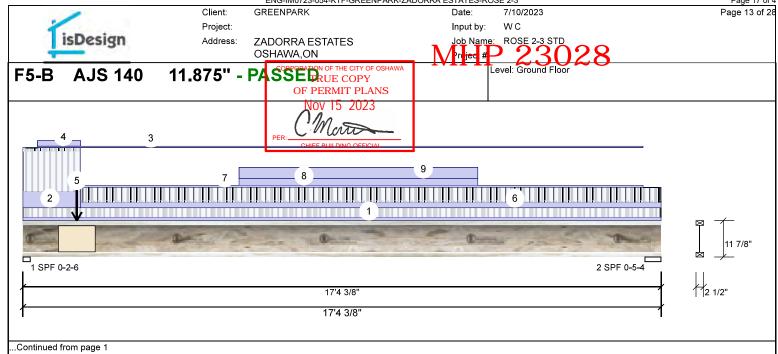
Boise Cascade Wood Products 1111 W. Jefferson St.

Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Kott Inc. 3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400







Dead

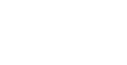
10 PLF

16 PLF

Live

0 PLF

0 PLF



Snow

0 PLF

0 PLF

Wind

0 PLF

0 PLF

Comments



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Notes

ID

8

9

Load Type

Part. Uniform

Part. Uniform

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Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. Noist flanges must not be out or drilled

2. Refer to latest copy of the IJoist product information
details for framing details, stiffener tables, web hole
chart, bridging details, multi-rily fastening details and
handling/erection details

3. Damaged IJoists must not be used
4. Design assumes top flange to be laterally restrained
by attached sheathing or as specified in engineering
notes.

Location Trib Width

5-10-9 to 12-4-9

5-10-9 to 12-4-9

Side

Тор

Тор

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3,5 inches
 For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St.

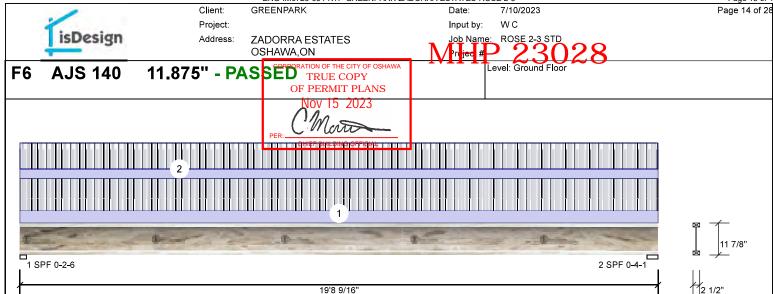
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Kott Inc.

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400







| Member Inforn | nation | | | Unfa | actored Rea | ctions UN | PATTERNED I | b (Uplift) | |
|------------------------------------|--------------|---------------------|------------------------------------|------|--------------|------------|-------------------------|----------------|------------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Direction | Live | Dead | Snow | Wind |
| Plies: | 1 | Design Method: | LSD | 1 | Vertical | 542 | 203 | 0 | 0 |
| Moisture Condition: Deflection LL: | : Dry 360 | Building Code: | NBCC 2015 OBC 2012(2020 Update) | 2 | Vertical | 550 | 206 | 0 | 0 |
| Deflection TL: | 240 | Load Sharing: | No | | | | | | |
| Importance: General Load | Normal - II | Deck: Vibration: | Not Checked Not Checked | | | | | | |
| Floor Live: | 40 PSF | | | Bea | rings and Fa | actored Re | actions | | |
| Dead: | 15 PSF | | | Bea | aring Length | Dir. Ca | o. React D/L l b | Total Ld. Case | Ld. Comb. |
| | | | | 1 - | SPF 2.375" | Vert 63 | % 254 / 813 | 1067 L | 1.25D+1.5L |
| | | | | 2 - | SPF 4.070" | Vert 57 | % 258 / 824 | 1082 L | 1.25D+1.5L |

19'8 9/16'

Analysis Results

| Analysis | Actua l | Location | Allowed | Capacity | Comb. | Case |
|---------------|-----------------|-----------|---------------|-------------|------------|---------|
| Moment | 5076 ft-lb | 9'9 7/16" | 5305 ft-lb | 0.957 (96%) | 1.25D+1.5L | L |
| Unbraced | 5076 ft-lb | 9'9 7/16" | 5305 ft-lb | 0.957 (96%) | 1.25D+1.5L | L |
| Shear | 1052 l b | 19'5 1/4" | 2350 lb | 0.448 (45%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.223 (L/1041) | 9'9 1/2" | 0.643 (L/360) | 0.346 (35%) | D | Uniform |
| LL Defl inch | 0.593 (L/390) | 9'9 1/2" | 0.643 (L/360) | 0.922 (92%) | L | L |
| TL Defl inch | 0.816 (L/284) | 9'9 1/2" | 0.965 (L/240) | 0.846 (85%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o c
- 4 Bottom flange must be laterally braced at bearings.

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|-----------------|------------|------|--------|--------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 19-8-9 | 0-9-4 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 19-8-9 | 0-7-6 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Joist flanges must not be cut or drilled

 2. Refer to latest copy of the Juoist product information details for framing details. stifferer tables, web hole chart, bridging details, multi-rity fastening details and handling/erection details

 3. Damaged Juoists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3,5 inches
 For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

100528832 OF JULY 11, 2023

Manufacturer Info

1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Boise Cascade Wood Products

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Kott Inc.







Client: Address:

GREENPARK Project:

ZADORRA ESTATES

OSHAWA,ON

7/10/2023 WC Input by:

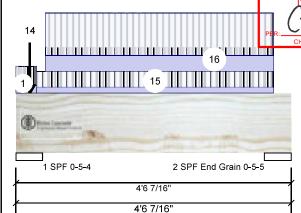
Job Name: ROSE 2-3 STD Projec #

Level: Ground Floor

Versa-Lam LVL 2.1E 3100 SP F8

1 750" X 11 875"

PASSED OF PERMIT PLANS 15 2023



| | Mem | ber | Infor | mation |
|--|-----|-----|-------|--------|
|--|-----|-----|-------|--------|

| Type: | Girder |
|---------------------|-------------|
| Plies: | 1 |
| Moisture Condition: | Dry |
| Deflection LL: | 360 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| General Load | |

Floor Live: 40 PSF 15 PSF Dead:

Application: Floor (Residential)

Design Method: LSD **Building Code: NBCC 2015** OBC 2012(2020 Update)

Load Sharing:

Not Checked Deck: Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

| Br | rg | Direction | Live | Dead | Snow | Wind |
|----|----|-----------|------|------|------|------|
| | 1 | Vertical | 412 | 204 | 0 | 0 |
| : | 2 | Vertical | 136 | 65 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
|----------------|--------|------|------|--------------|-------|----------|------------|
| 1 - SPF | 5.250" | Vert | 15% | 255 / 618 | 873 | L | 1.25D+1.5L |
| 2 - SPF End | 5.313" | Vert | 3% | 81 / 204 | 285 | L | 1.25D+1.5L |

Grain

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|---------------------|-----------|---------------|------------|------------|---------|
| Moment | 255 ft-lb | 2'3 3/16" | 17696 ft-lb | 0.014 (1%) | 1.25D+1.5L | L |
| Unbraced | 255 ft-lb | 2'3 3/16" | 17696 ft-lb | 0.014 (1%) | 1.25D+1.5L | L |
| Shear | 127 l b | 1'5 1/8" | 6608 lb | 0.019 (2%) | 1.25D+1.5L | L |
| Perm Defl in | 0.000 (L/143359) | 2'3 1/4" | 0.126 (L/360) | 0.003 (0%) | D | Uniform |
| LL Defl inch | 0.001 (L/66651) | 2'3 1/4" | 0.126 (L/360) | 0.005 (1%) | L | L |
| TL Defl inch | 0.001 (L/45498) | 2'3 1/4" | 0.189 (L/240) | 0.005 (1%) | D+L | L |

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be continuously laterally braced.
- 5 Bottom must be laterally braced at bearings



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| 9 | minaci se jateranj sracca a | t wearinger | | I . | | | | | |
|----|-----------------------------|----------------|------------|------|--------|--------|-------|-------|----------|
| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 1 | Tie-In | 0-0-0 to 0-4-1 | 0-6-14 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Point | 0-2-12 | | Top | 1 lb | 2 lh | 0 lb | 0 lb | .18 |

Bearing Length 0-5-8 0-2-12 0 lb

Continued on page 2...

Notes

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

1. UVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-rily fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used

Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

Manufacturer Info

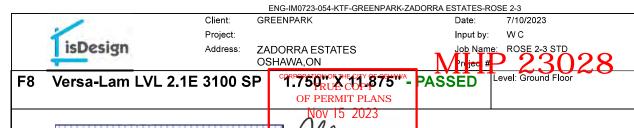
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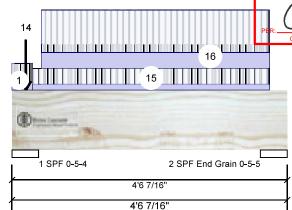
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Kott Inc.











| ſ | Continued from p | Continued from page 1 | | | | | | | | | | | |
|-----|------------------|-----------------------|------------------|------------|------|---------------|----------------|--------------|--------------|------------------|--|--|--|
| | I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 5 | Point | 0-2-12 | | Тор | 2 b | 0 lb | 0 l b | 0 l b | Wall Self Weight | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 7 | Point | 0-2-12 | | Тор | 6 l b | 16 l b | 0 lb | 0 l b | J8 | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 8 | Point | 0-2-12 | | Тор | 38 lb | 102 l b | 0 lb | 0 l b | J7 | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 9 | Point | 0-2-12 | | Тор | 15 l b | 0 lb | 0 lb | 0 l b | Wall Self Weight | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 11 | Point | 0-2-12 | | Тор | 7 l b | 19 l b | 0 lb | 0 l b | J8 | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 12 | Point | 0-2-12 | | Тор | 46 l b | 124 l b | 0 lb | 0 l b | J7 | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 14 | Point | 0-2-12 | | Тор | 19 l b | 0 lb | 0 lb | 0 l b | Wall Self Weight | | | |
| | | Bearing Length | 0-5-8 | | | | | | | | | | |
| | 15 | Tie-In | 0-4-1 to 4-2-15 | 0-5-10 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | | | | |
| | 16 | Part. Uniform | 0-5-13 to 4-2-15 | | Тор | 19 PLF | 50 PLF | 0 PLF | 0 PLF | | | | |
| | | Self Weight | | | | 6 PLF | | | | | | | |
| - 1 | | | | | | | | | | | | | |



JULY 11, 2023

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

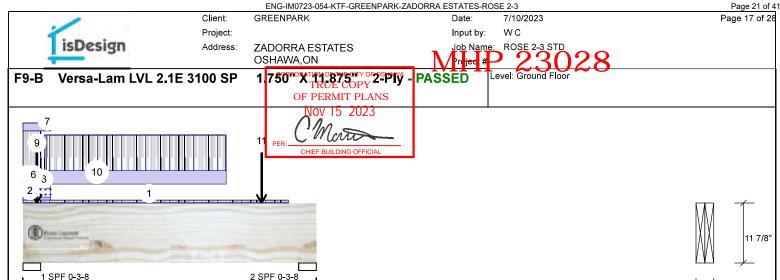
Manufacturer Info

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3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400





| Member Inforn | nation | | | Unfa | ctored Rea | ction | s UNPA | ATTERNED II | b (Upl | ift) |
|-----------------------------|-----------------|------------------------|------------------------------------|-------|------------|--------|--------|--------------|--------|-------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Direction | | Live | Dead | | Snov |
| Plies: | 2 | Design Method: | LSD | 1 | Vertical | | 1754 | 1137 | | 41 |
| Moisture Condition: | Dry 360 | Building Code: | NBCC 2015 OBC 2012(2020 Update) | 2 | Vertical | | 885 | 361 | | |
| Deflection TL: | 240 | Load Sharing: Deck: | No Not Checked | | | | | | | |
| Importance: General Load | Normal - II | Vibration: | Not Checked | | | | | | | |
| Floor Live: | 40 PSF | | | Beari | ngs and Fa | actore | d Reac | tions | | |
| Dead: | 15 PSF | | | Bear | ing Length | Dir. | Cap. | React D/L Ib | Total | Ld. (|
| | | | | 1-S | PF 3.500" | Vert | 59% | 1421 / 3048 | 4470 | L |
| Analysis Result | nalysis Results | | | | | Vert | 24% | 451 / 1328 | 1780 | L |

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|--------------------|------------|---------------|-------------|------------------|---------|
| Moment | 1922 ft-lb | 2'5 7/16" | 35392 ft-lb | 0.054 (5%) | 1.25D+1.5L +S | L |
| Unbraced | 1922 ft-lb | 2'5 7/16" | 35392 ft-lb | 0.054 (5%) | 1.25D+1.5L +S | L |
| Shear | 2364 lb | 3'6 11/16" | 13217 lb | 0.179 (18%) | 1.25D+1.5L +S | L |
| Perm Defl in. | 0.001 (L/36900) | 2'5 3/16" | 0.146 (L/360) | 0.010 (1%) | D | Uniform |
| LL Defl inch | 0.004 (L/15008) | 2'5 3/16" | 0.146 (L/360) | 0.024 (2%) | L+0.5S | L |
| TL Defl inch | 0.005 (L/10669) | 2'5 3/16" | 0.219 (L/240) | 0.022 (2%) | D+L+0.5S | L |

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.5.
- 2 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.

4'10 1/16' 4'10 1/16'

- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously laterally braced.
- 7 Bottom must have sheathing attached or be continuously braced.
- 8 Lateral slenderness ratio based on full section width.



JULY 11, 2023

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Boise, ID 83702 (800) 232-0788

This design is valid until 4/17/2026

Manufacturer Info

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Snow

417

Ld. Case

Wind

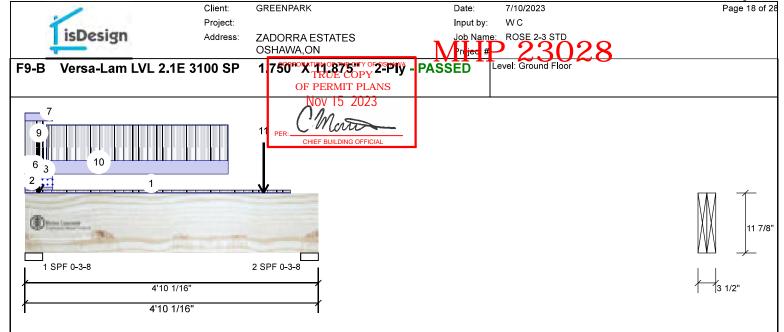
Ld. Comb. 1.25D+1.5L +S 1 25D+1 5L

+S

0 0







| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|----------------|-----------------|------------|-----------|----------------|---------|--------|--------------|-----------------------|
| 1 | Tie-In | 0-0-0 to 4-4-9 | 0-6-9 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Part. Uniform | 0-0-0 to 0-5-8 | | Тор | 30 PLF | 0 PLF | 86 PLF | 0 PLF | |
| 3 | Part. Uniform | 0-0-0 to 0-5-8 | | Тор | 45 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 5 | Part. Uniform | 0-0-0 to 0-5-8 | | Тор | 2 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| 6 | Part. Uniform | 0-0-0 to 0-3-11 | | Тор | 148 PLF | 395 PLF | 0 PLF | 0 PLF | J7 |
| 7 | Part. Uniform | 0-0-0 to 0-5-8 | | Тор | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 9 | Point | 0-2-12 | | Тор | 684 lb | 812 lb | 378 lb | 0 l b | B7 |
| | Bearing Length | 0-5-8 | | | | | | | |
| 10 | Part. Uniform | 0-4-3 to 3-4-3 | | Near Face | 137 PLF | 365 PLF | 0 PLF | 0 PLF | |
| 11 | Point | 3-11-3 | | Near Face | 193 l b | 516 lb | 0 lb | 0 l b | J7 |
| | Self Weight | | | | 12 PLF | | | | |



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Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 4/17/2026

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

(800) 232-0788 www.bc.com CCMC: 12472







Client: Project: Address:

GREENPARK

ZADORRA ESTATES OSHAWA,ON

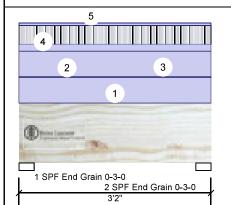
7/10/2023 Input by:

WC Job Name: ROSE 2-3 STD

Versa-Lam LVL 2.1E 3100 SP

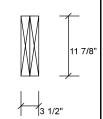
1 750°X,11"875° *2*PI OF PERMIT PLANS

Prejec # - PASSED Level: Ground Floor



3'2'

15 2023



Member Information

Application: Floor (Residential) Type: Plies: 2 Design Method: LSD Moisture Condition: Dry Building Code: **NBCC 2015** OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck: Not Checked Importance: Normal - II Vibration: Not Checked General Load Floor Live: 40 PSF 15 PSF Dead:

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 46 | 171 | 0 | 0 |
| 2 | Vertical | 46 | 171 | 0 | 0 |
| | | | | | |

Analysis Results

| Ana l ysis | Actua l | Location | Allowed | Capacity | Comb. | Case |
|-------------------|---------------------|-----------|---------------|------------|------------|---------|
| Moment | 174 ft-lb | 1'7" | 25128 ft-lb | 0.007 (1%) | 1.25D+1.5L | L |
| Unbraced | 174 ft-lb | 1'7" | 25128 ft-lb | 0.007 (1%) | 1.25D+1.5L | L |
| Shear | 188 l b | 1'11 1/8" | 9384 lb | 0.020 (2%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.000 (L/195443) | 1'7" | 0.093 (L/360) | 0.002 (0%) | D | Uniform |
| LL Defl inch | 0.000 (L/726735) | 1'7" | 0.093 (L/360) | 0.000 (0%) | L | L |
| TL Defl inch | 0.000 (L/154021) | 1'7" | 0.140 (L/240) | 0.002 (0%) | D+L | L |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Сар. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
|-------------------------|--------|------|------|--------------|-------|----------|------------|
| 1 - SPF End Grain | 3.000" | Vert | 4% | 213 / 69 | 282 | L | 1.25D+1.5L |
| 2 - SPF End Grain | 3.000" | Vert | 4% | 213 / 69 | 282 | L | 1.25D+1.5L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.

7 Lateral slenderness ratio based on full section width.



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: EWP-FLOORS. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|---------------|----------------|------------|-----------|--------|--------|-------|-------|------------------|
| 1 | Part. Uniform | 0-0-0 to 3-2-0 | | Тор | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 2 | Part. Uniform | 0-0-0 to 3-2-0 | | Near Face | 1 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 3 | Part. Uniform | 0-0-0 to 3-2-0 | | Near Face | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 4 | Tapered Start | 0-0-0 | | Near Face | 11 PLF | 29 PLF | 0 PLF | 0 PLF | |

Continued on page 2...

Notes

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used
- Dariga Beams must not be used
 Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12472







5

2

Client: Project: Address:

GREENPARK

7/10/2023 Input by:

WC

ROSE 2-3 STD

Page 20 of 28

Versa-Lam LVL 2.1E 3100 SP

3

OSHAWA,ON 1.750 X 17 875 **™2**™PI√

- PASSED Level: Ground Floor

Job Name:

OF PERMIT PLANS



ZADORRA ESTATES

11 7/8'

1 SPF End Grain 0-3-0 2 SPF End Grain 0-3-0 3'2'

1

..Continued from page 1

| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|-----------|----------|------------|------|--------|--------|-------|-------|----------|
| | End | 3-2-0 | | | 11 PLF | 29 PLF | 0 PLF | 0 PLF | |

5 Part. Uniform 0-0-0 to 3-2-0 Near Face 4 PLF 0 PLF 0 PLF 0 PLF Rim Board Self Weight

> Self Weight 12 PLF



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 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

(800) 232-0788 www.bc.com CCMC: 12472

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400







Client: Project: Address:

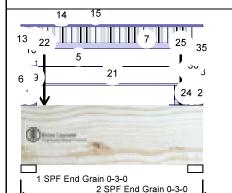
GREENPARK

ZADORRA ESTATES

7/10/2023 W C Input by:

Job Name: ROSE 2-3 DC Prejec # - PASSED Level: Ground Floor

Versa-Lam LVL 2.1E 3100 SP



OSHAWA,ON 1 750°X,11"875° *2*PI OF PERMIT PLANS

15 2023

11 7/8'

Member Information

| I | Туре: | Girder | Application: | Floor (Residential) |
|---|---------------------|-------------|----------------|-----------------------|
| ı | Plies: | 2 | Design Method: | LSD |
| ı | Moisture Condition: | Dry | Building Code: | NBCC 2015 |
| ı | Deflection LL: | 360 | | OBC 2012(2020 Update) |
| ı | Deflection TL: | 240 | Load Sharing: | No |
| ı | Importance: | Normal - II | Deck: | Not Checked |
| l | General Load | | Vibration: | Not Checked |
| ı | Floor Live: | 40 PSF | | |
| ı | Dead: | 15 PSF | | |
| ١ | | | | |

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 1188 | 839 | 259 | 0 |
| 2 | Vertical | 1272 | 871 | 259 | 0 |
| 1 | | | | | |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|--------------------|----------|------------------|-------------|------------------|---------|
| Moment | 1058 ft-lb | 1'6" | 35392 ft-lb | 0.030 (3%) | 1.25D+1.5L +S | L |
| Unbraced | 1058 ft-lb | 1'6" | 35392 ft-lb | 0.030 (3%) | 1.25D+1.5L +S | L |
| Shear | 1490 lb | 1'2 7/8" | 13217 l b | 0.113 (11%) | 1.25D+1.5L +S | L |
| Perm Defl in. | 0.000 (L/71487) | 1'6" | 0.088 (L/360) | 0.005 (1%) | D | Uniform |
| LL Defl inch | 0.001 (L/44672) | 1'6" | 0.088 (L/360) | 0.008 (1%) | L+0.5S | L |
| TL Defl inch | 0.001 (L/27492) | 1'6" | 0.131 (L/240) | 0.009 (1%) | D+L+0.5S | L |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. | React D/L l b | Total | Ld. Case | Ld. Comb. |
|-------------------------|--------|------|------|----------------------|-------|----------|------------------|
| 1 - SPF End Grain | 3.000" | Vert | 28% | 1048 / 2042 | 3090 | L | 1.25D+1.5L +S |
| 2 - SPF End Grain | 3.000" | Vert | 30% | 1088 / 2168 | 3256 | L | 1.25D+1.5L +S |

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.
- 2 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.
- 3 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be continuously laterally braced.
- 8 Bottom must have sheathing attached or be continuously braced.
- 9 Lateral slenderness ratio based on full section width.



JULY 11, 2023

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Notes

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

1. UVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used

Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400





Page 2 of 7



15

1 SPF End Grain 0-3-0

21

2 SPF End Grain 0-3-0

14

22

3

Client: Address:

24 2

Project:

ZADORRA ESTATES

GREENPARK

OSHAWA,ON

7/10/2023 Input by:

WC

ROSE 2-3 DC

Versa-Lam LVL 2.1E 3100 SP

1.750 X 17 8 75° ****2****PI/ OF PERMIT PLANS 15 2023

rejec #P - PASSED Level: Ground Floor

Job Name:

I.MATIJEVIC 100528832 JULY 11, 2023

11 7/8'

READ ALL NOTES ON THIS PAGE AND ON THE

ENGINEERING NOTES: EWP-FLOORS. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|----------------|-----------------|------------|-----------|---------|----------------|----------------|--------------|--------------------------------|
| 1 | Part. Uniform | 0-0-0 to 0-0-0 | | Near Face | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 2 | Part. Uniform | 0-0-0 to 0-0-0 | | Near Face | 60 PLF | 0 PLF | 173 PLF | 0 PLF | |
| 3 | Part. Uniform | 0-0-0 to 0-0-0 | | Near Face | 4 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| 4 | Part. Uniform | 0-0-0 to 0-0-0 | | Near Face | 90 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 5 | Tapered Start | 0-0-0 | | Near Face | 0 PLF | 1 PLF | 0 PLF | 0 PLF | |
| | End | 2-5-5 | | | 0 PLF | 1 PLF | 0 PLF | 0 PLF | |
| 6 | Part. Uniform | 0-0-0 to 0-0-0 | | Near Face | 148 PLF | 395 PLF | 0 PLF | 0 PLF | J7 |
| 7 | Part. Uniform | 0-0-0 to 2-9-13 | | Near Face | 147 PLF | 392 PLF | 0 PLF | 0 PLF | J7 |
| 8 | Tapered Start | 0-0-0 | | Near Face | 0 PLF | 1 PLF | 0 PLF | 0 PLF | |
| | End | 0-0-0 | | | 0 PLF | 1 PLF | 0 PLF | 0 PLF | |
| 9 | Part. Uniform | 0-0-0 to 0-3-2 | | Тор | 30 PLF | 0 PLF | 86 PLF | 0 PLF | |
| 10 | Part. Uniform | 0-0-0 to 0-3-2 | | Тор | 74 PLF | 197 PLF | 0 PLF | 0 PLF | J7 |
| 12 | Part. Uniform | 0-0-0 to 0-3-2 | | Тор | 2 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| 13 | Part. Uniform | 0-0-0 to 0-3-2 | | Тор | 45 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 14 | Part. Uniform | 0-0-0 to 3-0-0 | | Тор | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 15 | Part. Uniform | 0-0-0 to 3-0-0 | | Near Face | 4 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| 16 | Part. Uniform | 0-0-0 to 0-3-2 | | Near Face | 30 PLF | 0 PLF | 86 PLF | 0 PLF | |
| 17 | Part. Uniform | 0-0-0 to 0-3-2 | | Near Face | 74 PLF | 197 PLF | 0 PLF | 0 PLF | J7 |
| 19 | Part. Uniform | 0-0-0 to 0-3-2 | | Near Face | 2 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| 20 | Part. Uniform | 0-0-0 to 0-3-2 | | Near Face | 45 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 21 | Part. Uniform | 0-0-0 to 3-0-0 | | Near Face | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 22 | Point | 0-4-10 | | Тор | 397 lb | 495 lb | 216 lb | 0 lb | Header Column Header Column |
| | Bearing Length | 0-3-8 | | | | | | | |
| 23 | Tapered Start | 2-5-5 | | Near Face | 2 PLF | 5 PLF | 0 PLF | 0 PLF | |
| | End | 3-0-0 | | | 1 PLF | 3 PLF | 0 PLF | 0 PLF | |
| 24 | Part. Uniform | 2-6-6 to 3-0-0 | | Near Face | 131 PLF | 349 PLF | 0 PLF | 0 PLF | J7 |
| 25 | Point | 2-7-10 | | Тор | 397 lb | 495 l b | 216 l b | 0 l b | Header Column Header |

Continued on page 3...

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

0-3-8

- Handling & Installation

 1. IVI beams must not be cut or drilled

 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

Manufacturer Info

Column

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400

This design is valid until 4/17/2026



Bearing Length



Client: Project:

GREENPARK

7/10/2023 Input by:

WC

Page 3 of 7

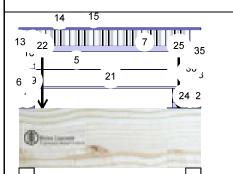
Address: **ZADORRA ESTATES**

OSHAWA,ON 1.750° XN111875° °2ºPI

Job Name: ROSE 2-3 DC

PASSED Level: Ground Floor

Versa-Lam LVL 2.1E 3100 SP



2 SPF End Grain 0-3-0

OF PERMIT PLANS 15 2023

11 7/8'

| .Continued | l from | page | 2 |
|------------|--------|------|---|
| | | | |

1 SPF End Grain 0-3-0

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|---------------|----------------|------------|-----------|--------|---------|--------|-------|-----------------------|
| 27 | Part. Uniform | 2-9-2 to 3-0-0 | | Near Face | 2 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| 28 | Part. Uniform | 2-9-2 to 3-0-0 | | Near Face | 45 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 29 | Part. Uniform | 2-9-2 to 3-0-0 | | Near Face | 30 PLF | 0 PLF | 86 PLF | 0 PLF | |
| 30 | Part. Uniform | 2-9-2 to 3-0-0 | | Near Face | 74 PLF | 197 PLF | 0 PLF | 0 PLF | J7 |
| 32 | Part. Uniform | 2-9-2 to 3-0-0 | | Тор | 2 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| 33 | Part. Uniform | 2-9-2 to 3-0-0 | | Тор | 45 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 34 | Part. Uniform | 2-9-2 to 3-0-0 | | Тор | 30 PLF | 0 PLF | 86 PLF | 0 PLF | |
| 35 | Part. Uniform | 2-9-2 to 3-0-0 | | Тор | 74 PLF | 197 PLF | 0 PLF | 0 PLF | J7 |
| | Self Weight | | | | 12 PLF | | | | |



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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

(800) 232-0788 www.bc.com CCMC: 12472

Manufacturer Info

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400







Client: Address:

GREENPARK Project:

ZADORRA ESTATES

OSHAWA,ON

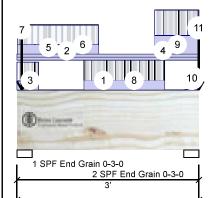
7/10/2023 Input by:

WC Job Name: ROSE 2-3 DC

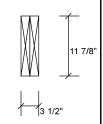
Versa-Lam LVL 2.1E 3100 SP

- PASSED OF PERMIT PLANS

Projec.# Level: Ground Floor



15 2023



| Member Information | on |
|--------------------|----|
|--------------------|----|

| Type: | Girder | Арр |
|---------------------|-------------|------|
| Plies: | 2 | Des |
| Moisture Condition: | Dry | Buil |
| Deflection LL: | 360 | |
| Deflection TL: | 240 | Loa |
| Importance: | Normal - II | Dec |
| General Load | | Vibr |
| Floor Live: | 40 PSF | |
| | | |

15 PSF

plication: Floor (Residential) sign Method: LSD ilding Code: **NBCC 2015**

OBC 2012(2020 Update) ad Sharing:

Not Checked ck: oration:

Not Checked

Analysis Results

Dead:

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|--------------------|------------|------------------|------------|------------|---------|
| Moment | 700 ft-lb | 1'5 9/16" | 35392 ft-lb | 0.020 (2%) | 1.25D+1.5L | L |
| Unbraced | 700 ft-lb | 1'5 9/16" | 35392 ft-lb | 0.020 (2%) | 1.25D+1.5L | L |
| Shear | 1071 l b | 1'2 7/8" | 13217 l b | 0.081 (8%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.000 (L/94444) | 1'6" | 0.088 (L/360) | 0.004 (0%) | D | Uniform |
| LL Defl inch | 0.000 (L/76398) | 1'5 15/16" | 0.088 (L/360) | 0.005 (0%) | L+0.5S | L |
| TL Defl inch | 0.001 (L/42235) | 1'6" | 0.131 (L/240) | 0.006 (1%) | D+L+0.5S | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.
- 7 Lateral slenderness ratio based on full section width.

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 1082 | 964 | 357 | 0 |
| 2 | Vertical | 1061 | 1071 | 481 | 0 |

Bearings and Factored Reactions

| Bearing Length | Dir. | Cap. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
|--------------------------------|------|------|--------------|-------|----------|------------------|
| 1 - SPF 3.000" End Grain | Vert | 29% | 1205 / 1980 | 3185 | L | 1.25D+1.5L +S |
| 2 - SPF 3.000" End Grain | Vert | 31% | 1339 / 2072 | 3411 | L | 1.25D+1.5L +S |



JULY 11, 2023

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| | , Easteral diolide | illoco lado bacca cil la | TOOGROIT WIGHT. | | | | | | | |
|---------------------|--------------------|--------------------------|-----------------|------------|-----------|---------|---------|-------|-------|-----------------------|
| | I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| | 1 | Tapered Start | 0-0-0 | | Near Face | 0 PLF | 1 PLF | 0 PLF | 0 PLF | |
| | | End | 2-9-4 | | | 0 PLF | 1 PLF | 0 PLF | 0 PLF | |
| | 2 | Part. Uniform | 0-0-0 to 3-0-0 | | Near Face | 4 PLF | 0 PLF | 0 PLF | 0 PLF | Rim Board Self Weight |
| | 3 | Part. Uniform | 0-0-0 to 0-4-4 | | Near Face | 119 PLF | 253 PLF | 0 PLF | 0 PLF | J6 |
| Continued on page 2 | | | | | | | | | | |

Notes

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Handling & Installation

- Handling & Installation

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 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

Manufacturer Info





Page 5 of 7



Client: Project: Address:

GREENPARK

ZADORRA ESTATES

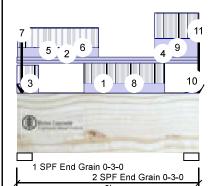
7/10/2023 Input by:

WC

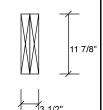
Versa-Lam LVL 2.1E 3100 SP

OSHAWA,ON 1.750 XXC PECOPY 2-Ply - PASSED

Job Name: ROSE 2-3 DC rriging #P 2.30 SED Level: Ground Floor



OF PERMIT PLANS 15 2023



| Continued | from page 1 | | | | | | | | |
|------------|----------------|----------------|------------|-----------|---------|---------|--------|-------|--------------------------------|
| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 4 | Part. Uniform | 0-0-0 to 3-0-0 | | Тор | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 5 | Part. Uniform | 0-0-0 to 3-0-0 | | Near Face | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 6 | Part. Uniform | 0-0-2 to 1-4-2 | | Near Face | 130 PLF | 264 PLF | 0 PLF | 0 PLF | J6 |
| 7 | Point | 0-1-0 | | Тор | 556 lb | 548 lb | 357 lb | 0 lb | Header Column Header Column |
| | Bearing Length | 0-3-8 | | | | | | | |
| 8 | Part. Uniform | 1-1-4 to 2-5-4 | | Near Face | 130 PLF | 265 PLF | 0 PLF | 0 PLF | J6 |
| 9 | Part. Uniform | 2-3-4 to 3-0-0 | | Near Face | 249 PLF | 340 PLF | 0 PLF | 0 PLF | J6 |
| 10 | Tapered Start | 2-9-4 | | Near Face | 2 PLF | 5 PLF | 0 PLF | 0 PLF | |
| | End | 3-0-0 | | | 1 PLF | 4 PLF | 0 PLF | 0 PLF | |
| 11 | Point | 3-0-0 | | Тор | 621 lb | 548 lb | 481 lb | 0 lb | Header Column Header Column |
| | Bearing Length | 0-3-8 | | | | | | | |
| | Self Weight | | | | 12 PLF | | | | |



READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTES: EWP-FLOORS. THE NOTE** PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

Manufacturer Info

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400





Page 6 of 7



Client: Project: Address:

GREENPARK

ZADORRA ESTATES OSHAWA,ON

7/10/2023

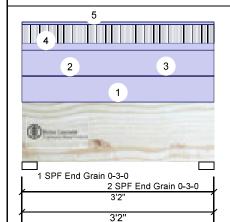
WC Input by:

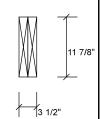
ROSE 2-3 DC Job Name: Projec # Level: Ground Floor

Versa-Lam LVL 2.1E 3100 SP

1.750 X RUE 875 OF Y ***2'-11'1** - PASSED OF PERMIT PLANS

15 2023





Snow

0

Wind

0

Member Information

| Туре: | Girder | Application: | Floor (Residential) |
|---------------------|-------------|----------------|-----------------------|
| Plies: | 2 | Design Method: | LSD |
| Moisture Condition: | Dry | Building Code: | NBCC 2015 |
| Deflection LL: | 360 | | OBC 2012(2020 Update) |
| Deflection TL: | 240 | Load Sharing: | No |
| Importance: | Normal - II | Deck: | Not Checked |
| General Load | | Vibration: | Not Checked |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | | |

Unfactored Reactions UNPATTERNED lb (Uplift) Live

46

| 2 | Vertical | 46 | 171 | 0 | 0 |
|---|----------|----|-----|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Dead

171

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|---------------------|-----------|---------------|------------|------------|---------|
| Moment | 174 ft-lb | 1'7" | 25128 ft-lb | 0.007 (1%) | 1.25D+1.5L | L |
| Unbraced | 174 ft-lb | 1'7" | 25128 ft-lb | 0.007 (1%) | 1.25D+1.5L | L |
| Shear | 188 l b | 1'11 1/8" | 9384 lb | 0.020 (2%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.000 (L/195443) | 1'7" | 0.093 (L/360) | 0.002 (0%) | D | Uniform |
| LL Defl inch | 0.000 (L/726735) | 1'7" | 0.093 (L/360) | 0.000 (0%) | L | L |
| TL Defl inch | 0.000 (L/154021) | 1'7" | 0.140 (L/240) | 0.002 (0%) | D+L | L |

Bearings and Factored Reactions

Direction

Vertical

| Bearing | Length | Dir. | Cap. | React D/L I b | Total | Ld. Case | Ld. Comb. |
|-------------------------|--------|------|------|----------------------|-------|----------|------------|
| 1 - SPF End Grain | 3.000" | Vert | 4% | 213 / 69 | 282 | L | 1.25D+1.5L |
| 2 - SPF End Grain | 3.000" | Vert | 4% | 213 / 69 | 282 | L | 1.25D+1.5L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.

7 Lateral slenderness ratio based on full section width.



JULY 11, 2023

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| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|---------------|----------------|------------|-----------|--------|--------|-------|-------|------------------|
| 1 | Part. Uniform | 0-0-0 to 3-2-0 | | Тор | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 2 | Part. Uniform | 0-0-0 to 3-2-0 | | Near Face | 1 PLF | 0 PLF | 0 PLF | 0 PLF | |
| 3 | Part. Uniform | 0-0-0 to 3-2-0 | | Near Face | 40 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 4 | Tapered Start | 0-0-0 | | Near Face | 11 PLF | 29 PLF | 0 PLF | 0 PLF | |
| | | | | | | | | | |

Continued on page 2...

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- 1. UVL beams must not be cut or drilled
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 3. Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products

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Page 7 of 7



Client: **GREENPARK**

Address:

Project:

7/10/2023

Input by: WC

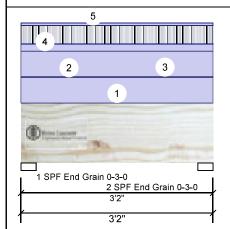
ROSE 2-3 DC

Versa-Lam LVL 2.1E 3100 SP

1.750 X NOT 1875 OF ⁵²-121v

P 230 Level: Ground Floor rrijed #P - PASSED

Job Name:



OF PERMIT PLANS 15 2023

ZADORRA ESTATES

OSHAWA,ON

11 7/8'

.Continued from page 1

ID Location Trib Width Load Type Side Live Snow Wind Comments Dead 3-2-0 11 PLF 29 PLF 0 PLF 0 PLF

5 Part. Uniform 0-0-0 to 3-2-0 Near Face 4 PLF 0 PLF 0 PLF 0 PLF Rim Board Self Weight

> Self Weight 12 PLF



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Handling & Installation

Handling & Installation

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5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St.

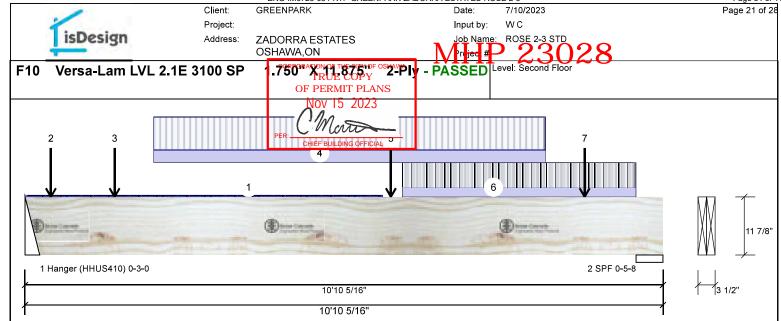
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Kott Inc.

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| Member Inforn | nation | | | Unfa | ctored Rea | action | s UNPA | ATTERNED II | o (Uplift) | |
|---------------------|-------------|----------------------|-----------------------|-------|-------------|--------|---------|--------------|----------------|------------|
| Type: | Girder | Application: | Floor (Residential) | Brg | Direction | | Live | Dead | Snow | Wind |
| Plies: | 2 | Design Method: | LSD | 1 | Vertical | | 2497 | 1042 | 0 | 0 |
| Moisture Condition: | Dry | Building Code: | NBCC 2015 | 2 | Vertical | | 3223 | 1335 | 0 | 0 |
| Deflection LL: | 360 | | OBC 2012(2020 Update) | | | | | | | |
| Deflection TL: | 240 | Load Sharing: | No | | | | | | | |
| Importance: | Normal - II | Deck: | Not Checked | | | | | | | |
| General Load | | Vibration: | Not Checked | | | | | | | |
| Floor Live: | 40 PSF | | | Bear | ings and F | actore | ed Read | tions | | |
| Dead: | 15 PSF | | | Bea | ring Length | Dir. | Cap. | React D/L Ib | Total Ld. Case | Ld. Comb. |
| | | | | 1 - | 3.000" | Vert | 44% | 1303 / 3745 | 5048 L | 1.25D+1.5L |
| | | | | Han | ger | | | | | |
| Analysis Results | 5 | | | 2 - 8 | SPF 5.500" | Vert | 55% | 1669 / 4834 | 6503 L | 1.25D+1.5L |
| Analysis Act | ual Lo | cation Allowed Capac | ity Comb. Case | | | | | | | |

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|----------------|------------|------------------|-------------|------------|---------|
| Moment | 18212 ft-lb | 6'2 3/4" | 35392 ft-lb | 0.515 (51%) | 1.25D+1.5L | L |
| Unbraced | 18212 ft-lb | 6'2 3/4" | 35392 ft-lb | 0.515 (51%) | 1.25D+1.5L | L |
| Shear | 6029 lb | 9'4 15/16" | 13217 l b | 0.456 (46%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.065 (L/1896) | 5'6 1/16" | 0.342 (L/360) | 0.190 (19%) | D | Uniform |
| LL Defl inch | 0.155 (L/794) | 5'6 1/16" | 0.342 (L/360) | 0.454 (45%) | L | L |
| TL Defl inch | 0.220 (L/560) | 5'6 1/16" | 0.514 (L/240) | 0.429 (43%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: DF, Thickness: 3 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be continuously laterally braced.
- 8 Bottom must have sheathing attached or be continuously braced.
- 9 Lateral slenderness ratio based on full section width.



JULY 11, 2023

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| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|---------------|-----------------|------------|-----------|----------------|---------|--------------|--------------|----------|
| 1 | Tie-In | 0-0-0 to 6-1-0 | 0-3-7 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Point | 0-5-5 | | Near Face | 94 l b | 250 lb | 0 l b | 0 l b | J6 |
| 3 | Point | 1-6-5 | | Near Face | 145 l b | 386 lb | 0 l b | 0 lb | J6 |
| 4 | Part. Uniform | 2-2-5 to 8-10-5 | | Near Face | 120 PLF | 320 PLF | 0 PLF | 0 PLF | |

Continued on page 2...

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

 2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

- 6. For flat roofs provide proper drainage to prevent ponding

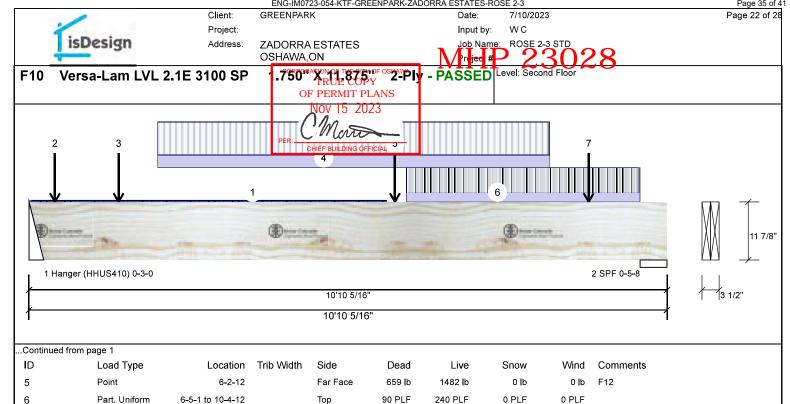
Manufacturer Info Boise Cascade Wood Products

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167 lb

12 PLF

445 lb

0 lb

0 lb

J6

Near Face



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Point

Self Weight

7

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

9-6-5

Handling & Installation

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5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

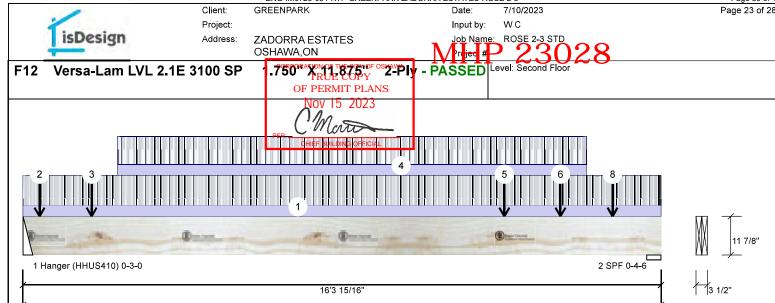
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Member Information **Unfactored Reactions UNPATTERNED lb (Uplift)** Application: Floor (Residential) Wind Type: Brg Direction Live Dead Snow Plies: 2 Design Method: LSD 1482 659 Vertical 0 1 0 Moisture Condition: Dry Building Code: **NBCC 2015** 2 Vertical 1835 807 n 0 OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Not Checked Deck: Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Dead: Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 3.000" Vert 27% 823 / 2223 3046 L 1.25D+1.5L Hanger Analysis Results 2 - SPF 4.375" Vert 40% 1008 / 2753 3761 L 1.25D+1.5L

16'3 15/16"

| | Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---------------|----------------|--------------|------------------|-------------|------------|---------|
| | Moment | 12575 ft-lb | 9' 5/8" | 35392 ft-lb | 0.355 (36%) | 1.25D+1.5L | L |
| | Unbraced | 12575 ft-lb | 9' 5/8" | 35392 ft-lb | 0.355 (36%) | 1.25D+1.5L | L |
| | Shear | 3547 lb | 14'11 11/16" | 13217 l b | 0.268 (27%) | 1.25D+1.5L | L |
| | Perm Defl in. | 0.122 (L/1556) | 8'3 5/8" | 0.528 (L/360) | 0.231 (23%) | D | Uniform |
| | LL Defl inch | 0.275 (L/691) | 8'3 3/4" | 0.528 (L/360) | 0.521 (52%) | L | L |
| | TL Defl inch | 0.397 (L/479) | 8'3 11/16" | 0.792 (L/240) | 0.501 (50%) | D+L | L |
| - | | | | | | | |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: DF, Thickness: 3 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be continuously laterally braced.
- 8 Bottom must have sheathing attached or be continuously braced.
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| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|---------------|------------------|------------|----------|--------|----------------|--------------|--------------|----------|
| 1 | Tie-In | 0-0-0 to 16-3-15 | 1-11-8 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Point | 0-5-1 | | Far Face | 43 lb | 116 l b | 0 lb | 0 lb | J2 |
| 3 | Point | 1-9-1 | | Far Face | 61 lb | 162 l b | 0 l b | 0 l b | J2 |
| 4 | Part. Uniform | 2-5-1 to 14-5-1 | | Far Face | 28 PLF | 74 PLF | 0 PLF | 0 PLF | |

Continued on page 2...

Notes

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-by fastening details, beam strength values, and code approvals Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

This design is valid until 4/17/2026

6. For flat roofs provide proper drainage to prevent ponding

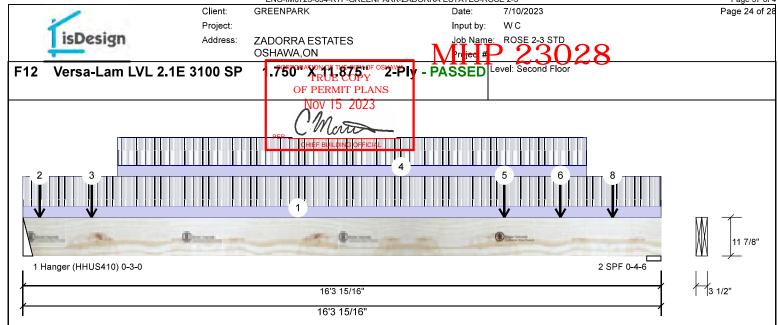
Manufacturer Info

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| Continued from page 1 | | | | | | | | | | |
|-----------------------|----|-------------|----------|------------|-----------|---------------|----------------|--------------|--------------|----------|
| | ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| | 5 | Point | 12-3-13 | | Near Face | 236 lb | 563 lb | 0 lb | 0 l b | F9 |
| | 6 | Point | 13-9-1 | | Near Face | 44 l b | 116 l b | 0 l b | 0 lb | J1 |
| | 7 | Point | 15-1-1 | | Far Face | 34 lb | 90 l b | 0 lb | 0 lb | J8 |
| | 8 | Point | 15-1-1 | | Near Face | 38 lb | 102 l b | 0 lb | 0 l b | J1 |
| I | | Self Weight | | | | 12 PLF | | | | |



JULY 11, 2023

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Continued from page 1

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

 2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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6. For flat roofs provide proper drainage to prevent ponding

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Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

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Client: Project: Address:

GREENPARK

ZADORRA ESTATES OSHAWA,ON

7/10/2023

W C

ROSE 2-3 STD Job Name: Prejec #

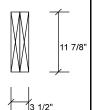
Versa-Lam LVL 2.1E 3100 SP

.750° XNOT 875° *2***PI

OF PERMIT PLANS

15 2023





2 1 SPF 0-5-4 2 SPF 0-4-2 1'4 1/16' 1'4 1/16

Member Information

| Type: | Girder |
|---------------------|-------------|
| Plies: | 2 |
| Moisture Condition: | Dry |
| Deflection LL: | 360 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| General Load | |

Floor Live: 40 PSF Dead: 15 PSF

Application: Floor (Residential)

> Design Method: LSD Building Code: **NBCC 2015**

OBC 2012(2020 Update) Load Sharing:

Not Checked Deck: Vibration: Not Checked **Unfactored Reactions UNPATTERNED lb (Uplift)**

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 0 | 41 | 0 | 0 |
| 2 | Vertical | 0 | 40 | 0 | 0 |
| | | | | | |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. React | D/L l b | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------------|----------------|-------|----------|-----------|
| 1 - SPF | 5.250" | Vert | 1% | 57 / 0 | 57 | Uniform | 1.4D |
| 2 - SPF | 4.125" | Vert | 1% | 55/0 | 55 | Uniform | 1.4D |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|----------------------|----------|-----------------|------------|-------|---------|
| Moment | 7 ft-lb | 8 3/16" | 23005 ft-lb | 0.000 (0%) | 1.4D | Uniform |
| Unbraced | 7 ft-lb | 8 3/16" | 23005 ft-lb | 0.000 (0%) | 1.4D | Uniform |
| Shear | 33 lb | 1/16" | 8591 l b | 0.004 (0%) | 1.4D | Uniform |
| Perm Defl in. | 0.000 (L/4961642) | 8 1/4" | 0.023 (L/360) | 0.000 (0%) | D | Uniform |
| LL Defl inch | 0.000 (L/999) | 0 | 999.000 (L/0) | 0.000 (0%) | | |
| TL Defl inch | 0.000 (L/4961642) | 8 1/4" | 0.034 (L/240) | 0.000 (0%) | D | Uniform |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.
- 7 Lateral slenderness ratio based on full section width.



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| I | I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|---|------------|---------------|------------------|------------|------|---------|-------|-------|-------|------------------|
| I | 1 | Part. Uniform | 0-3-12 to 0-8-13 | | Тор | 90 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| I | 2 | Part. Uniform | 0-8-13 to 1-4-1 | | Тор | 45 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| I | | Self Weight | | | | 12 PI F | | | | |

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702

(800) 232-0788 www.bc.com CCMC: 12472

Manufacturer Info

Kott Inc.







Client: Project: Address:

GREENPARK

ZADORRA ESTATES

OSHAWA,ON

7/10/2023 Input by:

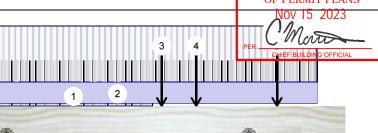
PASSED

W C Job Name: ROSE 2-3 STD Projec #

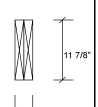
Level: Second Floor

Versa-Lam LVL 2.1E 3100 SP

1.750 XTRUE 5 Y OF 2-191y OF PERMIT PLANS



1 SPF 0-6-1 2 SPF End Grain 0-5-8 5'9 9/16' 5'9 9/16'



Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal - II

General Load Floor Live: 40 PSF 15 PSF Dead:

Application: Floor (Residential)

> Design Method: LSD Building Code:

NBCC 2015 OBC 2012(2020 Update)

Load Sharing:

Deck: Not Checked Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 2407 | 993 | 0 | 0 |
| 2 | Vertical | 2191 | 905 | 0 | 0 |

Bearings and Factored Reactions

Grain

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 6.080" Vert 1241 / 3610 4852 L 1.25D+1.5L 2 - SPF 5.500" Vert 22% 1131 / 3286 4417 L 1.25D+1.5L End

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|----------------|------------|------------------|-------------|------------|---------|
| Moment | 8656 ft-lb | 2'9 3/16" | 35392 ft-lb | 0.245 (24%) | 1.25D+1.5L | L |
| Unbraced | 8656 ft-lb | 2'9 3/16" | 35392 ft-lb | 0.245 (24%) | 1.25D+1.5L | L |
| Shear | 4430 lb | 1'5 15/16" | 13217 l b | 0.335 (34%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.007 (L/8472) | 2'10 1/4" | 0.165 (L/360) | 0.042 (4%) | D | Uniform |
| LL Defl inch | 0.017 (L/3499) | 2'10 1/4" | 0.165 (L/360) | 0.103 (10%) | L | L |
| TL Defl inch | 0.024 (L/2477) | 2'10 1/4" | 0.248 (L/240) | 0.097 (10%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.

7 Lateral slenderness ratio based on full section width.



JULY 11, 2023

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| / Edicial clottect tate paced of fall cocacif water. | | | | | | | | | |
|--|---------------|----------------|------------|-----------|-----------------|-----------------|-------|-------|----------|
| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 1 | Tie-In | 0-0-0 to 2-7-7 | 0-3-8 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Part. Uniform | 0-0-0 to 5-4-0 | | Far Face | 126 PLF | 336 PLF | 0 PLF | 0 PLF | |
| 3 | Point | 2-9-3 | | Near Face | 1042 l b | 2497 l b | 0 lb | 0 lb | F10 |
| 4 | Point | 3-4-0 | | Near Face | 43 lb | 116 l b | 0 lb | 0 lb | J2 |
| 5 | Point | 4-8-0 | | Near Face | 61 lb | 162 l b | 0 lb | 0 lb | J2 |
| | Self Weight | | | | 12 PLF | | | | |
| | | | | | | | | | |

Notes

Notes

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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- 1. UVL beams must not be cut or drilled
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 3. Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

Boise Cascade Wood Products 1111 W. Jefferson St.

Kott Inc.

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400





PASSED



Client: Project: Address:

GREENPARK

ZADORRA ESTATES

OSHAWA,ON

7/10/2023 Input by:

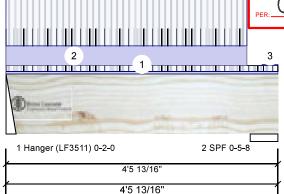
W C Job Name: ROSE 2-3 STD

Level: Second Floor

Versa-Lam LVL 2.1E 3100 SP

1.750 TRUE COPY OF PERMIT PLANS

15 2023



11 7/8'

| M | em | ber | Info | rma | tion |
|---|----|-----|------|-----|------|
|---|----|-----|------|-----|------|

| Type: | Girder | Application: |
|---------------------|-------------|----------------|
| Plies: | 2 | Design Method: |
| Moisture Condition: | Dry | Building Code: |
| Deflection LL: | 360 | |
| Deflection TL: | 240 | Load Sharing: |
| Importance: | Normal - II | Deck: |
| General Load | | Vibration: |
| Floor Live: | 40 PSF | |

15 PSF

Floor (Residential) LSD **NBCC 2015** OBC 2012(2020 Update)

Not Checked Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind |
|-----|-----------|------|------|------|------|
| 1 | Vertical | 563 | 236 | 0 | 0 |
| 2 | Vertical | 520 | 224 | 0 | 0 |
| | | | | | |

Bearings and Factored Reactions

| Bearing | Length | Dir. | Cap. R | eact D/L I b | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|--------|---------------------|-------|----------|------------|
| 1 - | 2.000" | Vert | 15% | 295 / 845 | 1140 | L | 1.25D+1.5L |
| Hanger | | | | | | | |
| 2 - SPF | 5.500" | Vert | 9% | 280 / 780 | 1060 | L | 1.25D+1.5L |

Analysis Results

Dead:

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|--------------------|----------|---------------|------------|------------|---------|
| Moment | 1078 ft-lb | 2'1 1/8" | 35392 ft-lb | 0.030 (3%) | 1.25D+1.5L | L |
| Unbraced | 1078 ft-lb | 2'1 1/8" | 35392 ft-lb | 0.030 (3%) | 1.25D+1.5L | L |
| Shear | 527 lb | 3' 7/16" | 13217 lb | 0.040 (4%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.001 (L/70228) | 2'1 1/8" | 0.133 (L/360) | 0.005 (1%) | D | Uniform |
| LL Defl inch | 0.002 (L/29433) | 2'1 1/8" | 0.133 (L/360) | 0.012 (1%) | L | L |
| TL Defl inch | 0.002 (L/20741) | 2'1 1/8" | 0.199 (L/240) | 0.012 (1%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: DF, Thickness: 3 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be continuously laterally braced.
- 8 Bottom must be laterally braced at bearings.
- 9 Lateral slenderness ratio based on full section width.



IULY 11 2023

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Handling & Installation

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3. Damaged Beams must not be used

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Provide lateral support at bearing points to avoid
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6. For flat roofs provide proper drainage to prevent ponding

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www.bc.com CCMC: 12472

Manufacturer Info

Kott Inc.

3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400







Client: Address:

GREENPARK Project:

ZADORRA ESTATES

OSHAWA,ON

7/10/2023 Input by:

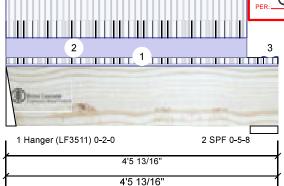
WC

Job Name: ROSE 2-3 STD P 230 Level: Second Floor Projec #

Versa-Lam LVL 2.1E 3100 SP

1.750°°×XTPN°875°°°2°PN PASSED OF PERMIT PLANS

ov 15 2023



| | 11 7/8" |
|-----|---------|
| 3 1 | 1/2" |

| I D | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|------------|---------------|------------------|---------------------|------|--------|---------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 4-5-13 | 0-8-10 to 0-8-10 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Part. Uniform | 0-0-0 to 3-11-11 | | Тор | 90 PLF | 240 PLF | 0 PLF | 0 PLF | |
| 3 | Part. Uniform | 4-2-11 to 4-5-13 | | Тор | 4 PLF | 0 PLF | 0 PLF | 0 PLF | |
| | Self Weight | | | | 12 PLF | | | | |



JULY 11, 2023

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Handling & Installation

1. IVI beams must not be cut or drilled

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CSD DESIGN

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